

**ARTICLE APPEARED  
ON PAGE 120**

AIR FORCE  
June 1985

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**T**HE military forces of the Soviet Union and of its allies "continue to expand, modernize, and deploy . . . increasingly capable weapon systems designed for the entire spectrum of strategic, theater-nuclear, and conventional conflict," Defense Secretary Caspar W. Weinberger asserted in the preface to the just-released fourth edition of *Soviet Military Power*, the free world's most authoritative and comprehensive analysis of the growing military might of the USSR.

The new *Soviet Military Power* edition enumerates in detail the latest dazzling achievements of Moscow's technology programs: at least three new high-energy laser weapons for air defense, an array of new strategic weapons, and marked advances in particle-beam weapons and radio-frequency (RF) systems that could not only put out of commission critical electronic components of US weapons but could also inflict disorientation or physical injury on personnel. But perhaps more illustrative of Moscow's global ambitions than a catalog of the expansion of the Soviet arsenal is the report's description of evolving Soviet doctrine.

That doctrine posits that the next global war would be a decisive clash "between two diametrically opposed socioeconomic systems"—socialism and capitalism. Such a conflict would force most of the world's nations to take sides and thus is bound to evolve into a coalition war, fought by two major groupings of nations, each pursuing specific political and military objectives. In line with this thinking, the Soviets are developing and implementing a single strategic policy for all Warsaw Pact forces. To back up this contention, the new US intelligence document points out that the USSR openly refers to the Warsaw Pact as "a unified command formation."

#### Conventional and Nuclear

The Soviets are now thought to believe that a world war might begin and be waged for an undefined period with only conventional weapons. The US intelligence community still ascribes to Moscow the presumption that, while general nuclear war should not be considered inevitable, the possibility of escalation to global nuclear war cannot be ruled out. But the new US document goes on to suggest that "despite the fact that strategic nuclear forces would play the dominant role in such a war, the Soviets recognize the crucial function of ground armies in seizing and occupying their ultimate objectives."

Further, though the Soviets are unsure about how long a future global conflict might last, there is evidence that they attach major importance to the initial phase of conflict. They seemingly reason that what happens at the outset would, to a major extent, determine the course of all subsequent combat actions. In line with this assumption, overall mobilization capabilities and smooth transition from peacetime to wartime operations

become top-priority concerns.

Because of the global perspective of Moscow's military doctrine, Soviet force structure and doctrine gravitate toward a kinetic, highly mobile form of strategy that puts little stock in continuous fronts. Instead, the emphasis is on rapid and sharp changes in the strategic situation and deep penetrations into the rear areas of enemy forces. Soviet forces, the US believes, "would rely on mobility and maneuver to wage an intense struggle to seize and maintain the initiative."

In extension of these precepts, the Soviets emphasize the primacy of the offensive, stating that military and political objectives are ultimately achieved only through aggressive and continuous offensive actions. Reduced to tangible, practical terms, this Soviet doctrine leads to a thoroughly integrated approach to warfare: "The Soviet concept of combined-arms warfare specifies that the various services and independent units must be brought together under a single unified commander at the army, front, and theater of military operations levels."

Boiled down to bedrock specifics, Soviet aims in a global war are thought to be:

- The defeat of NATO forces at any level of conflict, the occupation of Western Europe, and the use of Europe's economic assets to assist Soviet recovery.
- The neutralization of the United States and China by disorganizing or destroying their military forces.
- The domination of the postwar world and the replacement of "capitalism" by "socialism" as the basic politico-economic system of all nations.

#### Seeking Nuclear Superiority

In line with the global scope of Soviet policy, Moscow has consistently and relentlessly followed plans over the past quarter century for the development of superior nuclear attack forces. This commitment is seemingly not in conflict with Moscow's belief that the consequences of nuclear war would be catastrophic. The grand strategy of the Soviet Union, therefore, is to attain its objectives, if possible, by means short of war. This means exploiting the coercive leverage inherent in superior forces, especially nuclear forces, to the fullest—instilling fear, eroding the West's collective security arrangements, and supporting subversion. The primal role of Soviet military power is to provide the essential underpinnings for the step-by-step extension of Soviet influence and control.

In a worst-case scenario, Soviet strategic policy would be to destroy Western nuclear forces before launch or while in flight to their targets. The Soviets believe that preemption would be essential to ensure national survival and to support and sustain combined-arms combat in several theaters of military operations.

This grand strategy, according to the new US assessment, translates into several primary wartime missions.

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Included here are disruption and destruction of the West's essential command control and communications capabilities as well as destruction or neutralization of the West's nuclear forces on the ground or at sea, before they could be launched. Protection of the Soviet leadership and cadres, military forces, and military and economic assets necessary to sustain the war is treated as a categoric imperative.

The tools for carrying out this strategy are the Soviet offensive forces—ICBMs, longer-range intermediate-range nuclear forces, SLBMs, short-range ballistic missiles (SRBMs), cruise missiles, and bombers—as well as antisatellite weapons. The nuclear forces are charged with fulfilling their missions under all circumstances. In a nuclear exchange, the Soviets believe the most favorable circumstance would be a preemptive strike; the least favorable would be a follow-on strike after nuclear weapons had hit the USSR. Keys to success in preemption would be effective coordination of the strike and sound intelligence on Western intentions.

To cope with the second contingency—that of launch under attack—the Soviets have deployed a satellite-based ICBM launch-detection system, have built an over-the-horizon radar missile launch-detection system to back up the satellites, and have ringed the USSR with large phased-array radars. These sensor systems enable the Soviets to launch their nuclear forces very quickly.

#### New ICBMs

Follow-on strikes obviously require survivable weapons as well as robust command and control systems. For that reason, the Soviets shelter their ICBMs in the world's hardest silos. The same is true for Soviet anti-ballistic missile systems. In addition, new Soviet ICBMs are being designed for mobile basing.

According to *Soviet Military Power*, two new solid-propellant ICBMs, the SS-X-24—comparable in size to MX—and the SS-X-25—about the size of Minuteman—are being readied for mobile deployment. These two weapon systems are “well along in their flight-test programs from the range head at Plesetsk in the Soviet north.” The SS-X-24 is expected to be rail-mobile, while the SS-X-25 is going to be road-mobile in a manner similar to that of the 414 SS-20s deployed in various regions of the USSR. As a result, these new weapons will be highly survivable and have an “inherent refire capability.”

The US report discloses that two bases—probably serving the SS-X-25 system—are nearing completion. They consist of launcher garages with sliding roofs and several support buildings to house the necessary mobile support equipment.

Other recent activities at Soviet ICBM test sites have caused US intelligence to conclude that two other new ICBMs are under development. One of them—thought to be a replacement of the SS-18 and thus prohibited by SALT II—is nearing the flight-test stage, while the other—a solid-propellant missile apparently larger than MX and thus also outlawed by that accord—will begin flight-testing in a few years, according to US intelligence. Both of these new ICBMs are expected to be more accurate and to provide more throw-weight than their predecessors.

Modernization of the Soviet submarine-launched ballistic missile forces has culminated in the deployment of three *Typhoons*—the world's largest SSBN, whose 25,000-ton displacement exceeds that of the new US Trident by about one-third. Three or four additional boats are under construction, according to US intelligence. As of the start of this year, there were sixty-two modern Soviet SSBNs in operation, carrying a total of 928 SLBMs. More than two-thirds of these SSBNs are fitted with long-range SLBMs, meaning that these submarines can fire on targets in the US while in home port or while patrolling waters close to the Soviet Union, where they are basically out of reach of US attack submarines.

Over the longer term, US intelligence sees evidence that the Soviet Navy is working toward modification of its most modern and capable SLBMs—the SS-N-20 and SS-NX-23—to boost the accuracy of these weapons, presumably to gain hard-target kill capabilities similar to those sought by the US Navy for its new D-5 SLBM.

#### Strategic Aviation

Among recent advances in Soviet strategic aviation reported by the latest edition of *Soviet Military Power* is the deployment of about twenty-five new Bear-H strategic bombers as carriers for the AS-15 air-launched cruise missile. This missile has a range of about 3,000 kilometers and is similar to the US Tomahawk cruise missile in size and performance.

Four other long-range cruise missile systems are known to be under development. Two of them appear to be variants of the AS-15, while the other two are significantly larger and capable of operating over great distances. The two smaller designs can be launched from sea- as well as ground-based platforms.

The sea-based variant, designated the SS-NX-21, is small enough to be fired from standard Soviet torpedo tubes. According to the US report, the SS-NX-21 is about to achieve operational status and “could be deployed on submarines near US coasts.” Candidate launch platforms for the SS-NX-21 include the nuclear-powered *Victor III* attack submarine (SSN), a new *Yankee*-class SSN, and the new *Akula*, *Mike*, and *Siberia*-class SSNs.

One of the two new ultra-large cruise missiles, the SS-NX-24, is expected to reach operational status in about two years. These advanced cruise missiles, US intelligence experts believe, will be deployed initially with nuclear warheads. Eventually, these weapons are expected to attain sufficient accuracies to permit the use of conventional warheads. Conventionally armed, highly accurate cruise missiles, according to the new US threat assessment, “would pose a significant nonnuclear threat to US and NATO airfields and nuclear weapons in a nonnuclear conflict.”

#### Radio-Frequency Weapons

Evidence over the past year of major Soviet progress in directed-energy weapons R&D has been comprehensive, according to US intelligence. In the emerging field of radio-frequency weapons—an area the Soviets are thought to have pursued more vigorously than the US—

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the new issue of *Soviet Military Power* finds that the USSR is conducting research on strong RF signals "that have the potential to interfere with or destroy components of missiles, satellites, and reentry vehicles."

In the 1990s, the US intelligence community fears, the Soviets could test a ground-based RF weapon capable of damaging satellites. By the late 1980s, the Soviets might be able to test prototypes of ground-based laser weapons for ballistic missile defense. Also, they have started development of at least three types of high-energy weapons for air defense. Included here are "lasers intended for defense of high-value strategic targets in the USSR, for point defense of ships at sea, and for air defense of theater forces," according to the new US assessment.

There is also evidence that the Soviets are working on airborne lasers that might reach operational status in the early 1990s. These systems could be used for such missions as "antisatellite operations, protection of high-value airborne assets, and cruise missile defense." The USSR's high-energy laser program has mushroomed to a point where it now involves more than 10,000 scientists and engineers and several R&D facilities and test ranges. Prototype weapon systems are being tested, and existing ground-based systems can be used to interfere with US satellites.

Current efforts have reached a point where the Soviets could start construction of ground-based laser ASAT facilities at operational sites immediately. While the Soviets are devoting major efforts to research involving particle-beam weapons, it does not appear probable that they could test ASATs of this type before the mid-1990s.

#### **Early Warning Sensors**

According to US intelligence, the Soviet Union has built the world's most extensive early warning system

for ballistic missile and air defense. As a result, the Soviets are assured of about a thirty-minute warning of any US ICBM launch and of determining the general area of such a launch by using two independent sensor systems. One is a satellite-based warning system, and the other comprises two over-the-horizon radars that monitor the US ICBM fields.

Another layer of warning sensors—consisting of eleven large detection and tracking radars at six locations on the periphery of the USSR—"can distinguish the size of an attack, confirm the warning from the satellite and over-the-horizon radar systems, and provide target-tracking data in support of antiballistic missile [ABM] deployments," according to *Soviet Military Power*.

In the space arena, the US has "no counterpart" to Soviet ocean reconnaissance satellites known as Electronic Intelligence Ocean Reconnaissance Satellites (EORSATs) and nuclear-powered Radar Ocean Reconnaissance Satellites (RORSATs). These are designed "to detect, locate, and target US and allied naval forces for destruction by antiship weapons" launched from various platforms. Four satellites of this type—two RORSATs and two EORSATs—were launched by the Soviets in 1984.

The Soviets have also put into operation a new radar-carrying satellite system that greatly enhances the Soviet Navy's ability to operate in icebound areas. The system maps ice formation in polar regions. Overall, the new issue of *Soviet Military Power* reports Soviet weapons procurement ran ahead of procurement by this country by fifty percent over the past decade. Military spending by the Soviet Union now absorbs between fifteen to seventeen percent of the USSR's estimated GNP—roughly double the US rate.